

Next
See Amended Specification

N^o 20,034



A.D. 1900

Date of Application, 7th Nov., 1900

Complete Specification Left, 26th July, 1901—Accepted, 7th Sept., 1901

PROVISIONAL SPECIFICATION.

Improvements in the Obtainment of Disinfectant and Antiseptic Preparations.

I, REGINALD JOHN YARNOLD, of 44, Sternhold Avenue, Streatham Hill, Surrey, Electro-Chemist, do hereby declare the nature of this invention to be as follows:—

5 This invention has reference to the production of oxygenated substances possessing germicidal properties and suitable for disinfectant and antiseptic uses generally.

To this end, the invention is characterized by the oxygenation of terpineol (a terpene of the formula $C_{10}H_{17}OH$) either alone or in the presence of water by submitting it to the action of ozone ozonized oxygen or ozonized air.

10 When treating the terpineol alone by ozone ozonized oxygen or ozonized air, the terpineol becomes oxygenated by combination with the ozone, and the resulting product is of a viscid or syrupy consistency. It has considerable oxygenating and antiseptic influences and is consequently of value as an oxidant and for germicidal disinfectant and antiseptic purposes generally, and
15 may be mixed with suitable substances for use as an ointment or lotion or used for medicinal purposes.

When treating the terpineol in presence of water, the reaction of the terpineol and ozone causes an evolution of oxygen in the form of hydrogen peroxide and also the production of peroxidized organic compounds which dissolve in the
20 water, which becomes saturated or charged therewith to any required degree, the result being an aqueous solution containing oxygen in a more or less active state capable of being readily evolved when brought into the presence of oxidizable matter. The aqueous solution is also of value as a medicinal agent for internal and external use and for germicidal disinfectant and antiseptic uses
25 generally.

The oxygenated compound or solution may be prepared by blowing the ozone ozonized oxygen or ozonized air through the terpineol, or through a mixture of water and terpineol, and the amount of oxygen evolvable from the compound or solution may be regulated by the amount of ozone passed thereinto and by
30 the proportions of the terpineol and water, thus enabling solutions of different strengths to be prepared for different uses.

Dated this 6th day of November, 1900.

DAY, DAVIES & HUNT,

Chartered Patent Agents, 321, High Holborn, London, W.C.

Agents for the Applicant.

COMPLETE SPECIFICATION.

Improvements in the Obtainment of Disinfectant and Antiseptic Preparations.

I, REGINALD JOHN YARNOLD, of 44, Sternhold Avenue, Streatham Hill, Surrey,
40 Electro-Chemist, do hereby declare the nature of this invention and in what
[Price 8d.]

Impts. in the Obtainment of Disinfectant and Antiseptic Preparations.

manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention has reference to the production of oxygenated substances possessing germicidal properties and suitable for disinfectant and antiseptic uses generally. 5

To this end, the invention is characterized by the oxygenation of terpineol (a terpene derivative of the formula $C_{10}H_{17}OH$) either alone or mixed with water by submitting it to the action of ozone ozonized oxygen or ozonized air.

When treating the terpineol alone by ozone ozonized oxygen or ozonized air, the terpineol becomes oxygenated by combination with the ozone, and the resulting product is of a viscid or syrupy consistency. It has considerable oxygenating and antiseptic influences and is consequently of value as an oxidant and for germicidal disinfectant and antiseptic purposes generally, and may be mixed with suitable unguent or liquid substances for use as an ointment or lotion or used for medicinal purposes. 10 15

When treating the terpineol mixed with water the latter holds in solution the oxygen in the form of hydrogen peroxide and of peroxidized organic compounds produced by the reaction and becomes more or less charged or saturated therewith, resulting in an aqueous solution containing oxygen in a more or less active state capable of being readily evolved when brought into the presence of oxidizable matter. The solution is also of value as a medicinal agent for internal and external use and for germicidal disinfectant and antiseptic uses generally. 20

The oxygenated compound or solution is prepared by blowing the ozone ozonized oxygen or ozonized air through the terpineol, or through a mixture of water and terpineol, and the amount of oxygen evolvable from the compound or solution may be regulated by the amount of ozone passed thereinto and by the proportions of the terpineol and water, thus enabling solutions of different strengths to be prepared for different uses. 25

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:— 30

1. The process of preparing germicidal and antiseptic compounds consisting in oxygenating terpineol by blowing ozone ozonized oxygen or ozonized air therethrough.

2. The process of preparing germicidal and antiseptic solutions consisting in oxygenating a mixture of terpineol and water by blowing ozone ozonized oxygen or ozonized air therethrough. 35

3. A germicidal and antiseptic compound consisting of terpineol oxygenated by blowing ozone ozonized oxygen or ozonized air therethrough.

4. A germicidal and antiseptic solution consisting of a mixture of terpineol and water oxygenated by blowing ozone ozonized oxygen or ozonized air there- 40 through.

Dated this 25th day of July, 1901.

DAY, DAVIES & HUNT.

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